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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/540,886	12/29/2005	Masakazu Ohara	033634-003	1767
21839 7590 06/29/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404			EXAMINER	
			LE, HOA T	
ALEXANDRIA, VA 22313-1404		•	ART UNIT	PAPER NUMBER
			1773	
	•		MAIL DATE	DELIVERY MODE
	•		06/29/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Application No.	Applicant(s)			
		10/540,886	OHARA ET AL.			
		Examiner	Art Unit			
		H. T. Le	1773			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR RICHEVER IS LONGER, FROM THE MAILIN nations of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication period for reply is specified above, the maximum statutory pre to reply within the set or extended period for reply will, by seply received by the Office later than three months after the reply attent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMU FR 1.136(a). In no event, however, may n. eriod will apply and will expire SIX (6) N statute, cause the application to become	NICATION.  The a reply be timely filed  IONTHS from the mailing date of this communication.  RABANDONED (35 U.S.C. § 133).			
Status						
1)	Responsive to communication(s) filed on _					
2a) <u></u> □	This action is <b>FINAL</b> . 2b)⊠	This action is non-final.				
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims					
5)□ 6)⊠ 7)□	Claim(s) 1-7 is/are pending in the application 4a) Of the above claim(s) is/are with Claim(s) is/are allowed.  Claim(s) 1-7 is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction a	ndrawn from consideration.				
	on Papers					
10)⊠	The specification is objected to by the Example The drawing(s) filed on 27 June 2005 is/are Applicant may not request that any objection to Replacement drawing sheet(s) including the country the oath or declaration is objected to by the	e: a) $\boxtimes$ accepted or b) $\square$ old the drawing(s) be held in abeomorection is required if the drawing.	yance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR 1.121(d).			
Priority u	ınder 35 U.S.C. § 119					
12)⊠ a)[	Acknowledgment is made of a claim for for All b) Some * c) None of:  1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International Busee the attached detailed Office action for a	nents have been received. nents have been received ir priority documents have be ureau (PCT Rule 17.2(a)).	n Application No en received in this National Stage			
2) Notice 3) Inform	t(s) The of References Cited (PTO-892) The of Draftsperson's Patent Drawing Review (PTO-948) The of Disclosure Statement(s) (PTO/SB/08) The No(s)/Mail Date June 2005.	3) Paper N	w Summary (PTO-413) lo(s)/Mail Date of Informal Patent Application			

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#### **DETAILED ACTION**

### Specification

- The disclosure is objected to because of the following informalities: Page 4, line
   "aforementioed" is a misspelling. Appropriate correction is required.
- 2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

# Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 4. Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
- 4.1. The specification describes that the oxygen ratio as one of the conditions that affect the properties of the resulting silica particles. However, the specification fails to define the ratio of the oxygen. It is not defined whether the oxygen ratio as reported in table 1 and table 4 is a ratio of oxygen of what component to what component.

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# Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless

- b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by the Mangold patent (US 6,063,354).

Claim 1: Mangold teaches silica particles of the claimed invention because the silica particles taught by Mangold possess the same BET surface area and made by from the same flame hydrolysis process under the same conditions as disclosed in the instant specification. Although Mangold does not report the  $\alpha$  value, the silica particles made by the same flame hydrolysis as described in the instant specification. See Mangold, col. 1, lines 36-40. In addition, the silica particles disclosed in the Mangold patent possess the same BET surface area as the claimed silica (see Mangold, col. 1, lines 60-65 and compare to the BET reported in the instant specification at Table 2). Furthermore, Mangold teaches an oxygen ratio (of feeding oxygen to required oxygen) from 0.7 to 0.9 which is equivalent to a reverse oxygen ratio (from required to feeding) of 1.1 to 1.4, which is the same oxygen ratio reported at Table 1 and Table 4 in the instant specification.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to H. T. Le whose telephone number is 571-272-1511.

The examiner can normally be reached on 10:00 a.m. to 6:30 p.m., Mondays to Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

\_\_*[H. Thi Le]* H. (Holly) T. Le Primary Examiner Art Unit 1773

June 21, 2007